

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions,
and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) An audio-intonation calibration method in which an audio signal emitted by a subject (S) is reproduced to the auditory organs of said subject (S) after real time processing, which method is characterized in that it comprises the following steps:

- acquisition (E10, E50) of a model audio signal to be imitated;

- first spectral analysis (E11, E51) of said model audio signal;

- acquisition (E13, E53) of an imitation audio signal that corresponds to the model audio signal and has been imitated emitted by the subject (S);

- second spectral analysis (E15, E55) of the imitation audio signal;

- comparison (E16, E56) of the spectra of the model audio signal and the imitation audio signal;

- correction (E18, E58) of the imitation audio signal as a function of the result of said comparison,

wherein at least the second spectral analysis step, the comparison step, and the correction step are carried out in real time and constitute the real time processing; and

- after the real time processing, reproduction (E22, E62) to the auditory organs of the subject (S) of the corrected imitation audio signal.

2. (original) An audio-intonation calibration method according to claim 1, characterized in that it further includes the following steps:

- measurement (E14, E24) of the dynamic range of the audio signal imitated by the subject (S);

- measurement (E18, E28) of the dynamic range of the corrected audio signal;

- comparison (E19, E59) of the dynamic range of the imitation audio signal and the corrected audio signal; and

- correction (E21, E61) of the dynamic range of the corrected audio signal as a function of the result of said comparison before reproduction to the auditory organs of the subject (S) of the corrected audio signal.

3. (previously presented) An audio-intonation calibration method according to claim 1, characterized in that the comparison steps (E16, E56) and correction steps (E18, E58) are executed over a series of frequency bands in the range of audible frequencies.

4. (original) An audio-intonation calibration method according to claim 3, characterized in that the series of frequency bands corresponds to a subdivision of the range of audible frequencies.

5. (previously presented) An audio-intonation calibration method according to claim 3, characterized in that the range of audible frequencies is divided into at least 50 frequency bands.

6. (previously presented) An audio-intonation calibration method according to claim 1, characterized in that the model audio signal to be imitated is a text and in that said method further includes a step (E24, E64) of displaying said text.

7. (previously presented) An audio-intonation calibration method according to claim 1, characterized in that it further includes a step (E12) of memorizing the spectral analysis of said model audio signal to be imitated.

8. (previously presented) An audio-intonation calibration method according to claim 1, characterized in that it includes a step (E22) of emitting said model audio signal to be imitated to the auditory organs of the subject (S) before the step (E13) of acquiring the imitation audio signal emitted by the subject (S).

9. (original) An audio-intonation calibration method according to claim 8, characterized in that it further includes,

before the emission step (E22), a step (E23) of modifying the model audio signal to be imitated as a function of parameters representative of a language being studied.

10. (previously presented) An audio-intonation calibration method according to claim 1, characterized in that the model audio signal to be imitated is a song and in that said method further includes, simultaneously with the step (E62) of reproducing the corrected audio signal to the auditory organs of the subject (S), a step (E62) of emitting an accompaniment signal of said song to the auditory organs of the subject (S).

11. (previously presented) A method of practicing speaking a language being studied, in which method an audio signal emitted by a subject (S) is reproduced to the auditory organs of the subject (S) after real time processing, and which method is characterized in that it uses an audio-intonation calibration method according to claim 1.

12. (previously presented) A method of performance of a song by a subject (S), in which method an audio signal emitted by a subject (S) is reproduced to the auditory organs of the subject after real time processing, and which method is characterized in that it uses an audio-intonation calibration method according to claim 1.

13. (previously presented) Fixed or removable information storage means, characterized in that said means

contain software code portions adapted to execute the steps of an audio-intonation calibration method according to claim 1.

14. (original) Fixed or removable storage means characterized in that said means contain software code portions adapted to execute the steps of the method according to claim 11 of practicing speaking a language being studied.

15. (original) Fixed or removable information storage means characterized in that said means contain software code portions adapted to execute the steps of the method according to claim 12 of performing a song.

16. (new) The method according to claim 1, wherein during the correction step, each frequency band of the imitation audio signal is corrected so that an intensity value of the imitation audio signal in the respective band corresponds to an intensity value of the model audio signal in the respective band.

17. (new) The method according to claim 1, wherein the reproduction step includes reproducing the corrected imitation audio signal in headphones on auditory organs of the subject.

18. (new) The method according to claim 1, wherein the first spectral analysis step includes dividing the model audio signal into a multiplicity of frequency bands and determining an intensity of the model audio signal in each of the frequency bands, wherein the second spectral analysis step includes dividing the imitation audio signal into same frequency bands as in the first spectral analysis step and determining an intensity

of the imitation audio signal in each of the frequency bands, wherein the comparison step includes, for each of the frequency bands, comparing the intensity of the model audio signal to the intensity of the imitation audio signal, and wherein the correction step includes correcting the imitation audio signal so that, for each of the frequency bands, an intensity of the corrected imitation audio signal corresponds to the intensity of the model audio signal.

19. (new) An audio-intonation calibration method in which an audio signal emitted by a subject is reproduced to auditory organs of the subject after real time processing, the method comprising the steps of:

acquiring a model audio signal that is to be imitated by the subject;

performing a first spectral analysis of the model audio signal including dividing the model audio signal into a multiplicity of frequency bands and determining an intensity of the model audio signal in each of the frequency bands;

emitting, by the subject, an imitation audio signal that corresponds to the model audio signal;

performing a second spectral analysis of the imitation audio signal including dividing the imitation audio signal into same frequency bands as in the first spectral analysis step and determining an intensity of the imitation audio signal in each of the frequency bands;

comparing, for each of the frequency bands, the intensity of the model audio signal to the intensity of the imitation audio signal;

correcting the imitation audio signal as a function of the result of the comparison step so that, for each of the frequency bands, an intensity of a corrected imitation audio signal corresponds to the intensity of the model audio signal,

wherein at least the second spectral analysis step, the comparing step, and the correcting step are carried out in real time and constitute the real time processing; and

after the real time processing, reproducing to the auditory organs of the subject the corrected imitation audio signal.